



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,600	11/19/2003	Shigetomo Tsujihata	Q78466	6440

23373 7590 07/23/2007  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
----------

SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
----------	--------------

1774

MAIL DATE	DELIVERY MODE
-----------	---------------

07/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER
----------

ART UNIT	PAPER
----------	-------

20070719

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Art Unit: 1774

1. The finality of the last office action has been withdrawn.
2. The Form 1449 submitted on March 28, 2007 has been considered, initialed and return to applicants with this communication.
3. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please provide answers to each of the following interrogatories eliciting factual information:

1. Is there a particular organic conceptual chart or charts that are used to determine I/O value as instantly claimed? If so, please provide the chart or charts.
2. How is a chemical structure broken down to evaluate which portions of the structure are inorganic and which portions are organic for purposes of calculating the I/O value?
3. How is the determination made as to whether a portion of a chemical structure is considered organic or inorganic for purposes of calculating I/O value?
4. Why would a benzene ring be considered inorganic as stated in the calculation of I/O value set forth at column 5, line 65 to column 6, line 31 of U.S. Patent No. 6,635,320?
5. Please provide examples of how I/O values are calculated by providing the calculations and values for the portion of the cationic polymers of Synthesis Examples 4-7 of U.S. Patent No. 6,743,850 that represent A and B of the polymer of General Formula A.

Art Unit: 1774

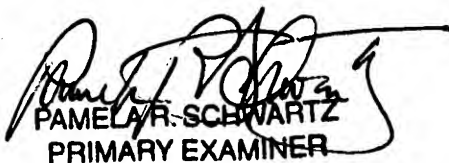
4. The information is required to complete the background description in the disclosure by documenting the availability of information necessary to calculate I/O value for units of polymers.
5. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.
6. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained may be accepted as a complete reply to the requirement for that item.
7. This requirement is subject to the provisions of 37 CFR 1.134, 1.135 and 1.136 and has a shortened statutory period of two months. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

Art Unit: 1774

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz  
July 19, 2007



PAMELA R. SCHWARTZ  
PRIMARY EXAMINER



GREGORY MILLS  
QUALITY ASSURANCE SPECIALIST